

**REMARKS/ARGUMENTS**

The amendments to the written description identify the relationship of the present application to the two applications previously set out in the Rule 53 (b) request for filing a divisional application. Applicant has not added new prior applications in this regard, but has only identified the parent application as a continuation of the grandparent, and this application as a continuation of the parent.

The amendments to the claims address the Examiner's 35 U.S.C. § 112 first and second paragraph rejections. In the first instance the amendment substitutes --or a mixture of said materials for decreasing friction between moving surfaces -- for the phrase "and mixtures thereof" in claim 29 as suggested by the examiner. The balance of the claims already describe combinations of the claimed components with the phrase --or mixtures thereof--. Secondly, the amendment clarifies the language of claim 29 by listing the various individual components of claim 29 in independent claims 45-50 and then claims the invention as a substantially anhydrous composition in multiple dependent claim 51, in the same manner as claim 44, now canceled without prejudice or disclaimer. Claims 52-53 claim the lubricant as water with a lubricant additive as originally presented in claim 29. Claim 54 copies claim 29, but without the water-lubricant additive, and characterizes the composition as "substantially anhydrous." The amendments to the claims therefore do not require an additional search by the examiner since the previous claims contained all of the subject matter now presented in independent claim format.

Applicant cannot respond to the 35 U.S.C. § 112 rejection of claims 1 and 57 since this application does not contain those claims.

The Examiner rejects claim 29 under 35 U.S.C. §102(b) as anticipated by Hopkins combined with The Merck Index and the admitted prior art. Applicant traverses the rejection and requests further consideration and reexamination.

Hopkins describes a method for combining a superabsorbent polymer with a "matrix" material such as cellulose acetate, methacrylate polymers, polyvinyl acetate, copolymers and combinations of these polymers. (Hopkins, col. 1, lines 29-35; col. 2, lines 10-19). The "matrix" material further includes "plasticizers" (col. 2, line 23) which, the skilled artisan knows increases the flexibility of the matrix material, i.e., cellulose acetate, methacrylate polymers, polyvinyl acetate, copolymers and combinations of these polymers.

Webster's Ninth New Collegiate Dictionary defines "matrix" as a "material in which something is enclosed or embedded (as for protection or study)." Hopkins obviously uses the matrix to envelop particles of the superabsorbent polymer in describing the invention as "providing a matrix material in a suitable solvent; mixing particles of a superabsorbent polymer into said solutioned [sic] matrix material to form a suspension; homogenizing the suspension; and removing the solid from the suspension." (Col. 1, lines 30-35) (emphasis added). The foregoing description clearly conveys that Hopkins only dissolves the matrix in a solvent and not the superabsorbent

polymer, but rather mixes particles of the superabsorbent polymer into the solution of the matrix in the solvent to form a "suspension."

In fact, Hopkins defines the term "suspension" as a "mixture containing a substantially uniform distribution of solute and particulate matter through the liquid carrier." (Col. 2, lines 30-33). There can be no doubt that Hopkins by referring to the "particles of a superabsorbent polymer" in this section, further confirms the end product comprises a matrix of materials such as cellulose esters that envelop particles of superabsorbent polymer. The subsequent disclosure relative to the plasticizers clearly teaches that these plasticizers combine with the matrix material and not with the superabsorbent polymer. Hopkins in this regard states that the "matrix material may further comprise additives [such as] plasticizers . . . ." (Col. 2, lines 19-23).

Thus the addition of plasticizers such as glycerin to the Hopkins composition addresses the need to plasticize the matrix material and in no way would teach a person with ordinary skill in the art that the plasticizers combine with the super absorbent polymer.

The examples describe adding a solution of cellulose acetate in acetone in combination with a superabsorbent polymer (Sanwet<sup>®</sup> IM-1000) and glycerin (a plasticizer) to a high shear mixing apparatus to form a solution, which when subsequently cast into films and air dried retains a 0.9% saline solution. Although

Hopkins combines a superabsorbent polymer with acetone in the examples, the skilled artisan knows that acetone will not dissolve superabsorbent polymers such as Sanwet<sup>®</sup> IM-1000, and that in essence the combination of acetone and superabsorbent polymer comprises a slurry of particles of the superabsorbent polymer in the acetone in order to facilitate introducing it into the solution of cellulose acetate. Furthermore, Hopkins had no awareness of any lubricating properties of the combination of cellulose acetate or other matrix materials with a superabsorbent polymer.

Hopkins fails to teach a utility for the combination of superabsorbent polymer and matrix material. The reference describes the matrix material as having good absorbent and retention properties and further immobilizes the superabsorbent polymer. (Col. 1, lines 18-19). Hopkins further indicates the matrix materials "can be made porous as would be desirable for filtration membranes." (Col. 1, line 66, Col. 2, lines 7-9).

The reference constitutes nonanalogous art in that it fails to teach anything about the formation of a lubricant or the use of the disclosed material for the purpose of lubrication. Applicant does not rely on the "consisting essentially of" terminology in the claims to distinguish Hopkins.

The Merck Index confirms that the prior art describes glycerin as a lubricant as well as a plasticizer, but Hopkins only uses it to plasticize the matrix, and doesn't combine glycerin with the superabsorbent polymer, only the matrix. The admitted prior art describes various known superabsorbent polymers, but nothing in the combination of

references teaches or suggests making the combination of superabsorbent polymers with a lubricant.

The Examiner appears to have combined the references to reject claim 1, using each teaching of The Merck Index and the admitted prior art individually, and not to amplify the disclosure of Hopkins. The rejection under 35 U.S.C. § 102 (b), therefore is not proper. A 35 U.S.C. §102 rejection sometimes referred to as "anticipation" cannot employ multiple references since a "finding of anticipation requires that all aspects of the claimed invention were already described in a single reference. . . . If it is necessary to reach beyond the boundaries of a single reference to provide missing disclosure of the claimed invention, the proper ground is not §102 anticipation, but §103 obviousness." Scripps Clinic v. Genentech Inc., 927 F.2d 1565, 18 U.S.P.Q. 2d 1001, 1010 (Fed. Cir. 1991) (citations omitted) (emphasis added). Here, the Examiner has employed the secondary references to supply additional elements lacking in the principal reference.

The examiner rejects claims 29, 33-36 and 41-43 under 35 U.S.C. §102 (b) as anticipated by Levy United States Patent No. 4,985,251 combined with Brannon-Peppas. Applicant traverses the rejection and requests further consideration and reexamination.

The Examiner, by combining references, precludes the use of 35 U.S.C. §102(b) to reject claims, as the court held in Scripps Clinic. The Examiner argues Brannon-Peppas teaches superabsorbent polymers absorb greater than 100 times its weight in water at page 245 and then combines this teaching with the Levy reference's disclosure of insecticides and herbicides based on superabsorbent polymers, and concludes this shows the lubricant compositions of claims 29, 33-36 and 41-43. This confirms the examiner has clearly made a rejection under 35 U.S.C. § 103 (a) and not 35 U.S.C. § 102, since the Examiner has not used the complete teaching of Brannon-Peppas to reject the claims.

The Examiner notes Brannon-Peppas discloses superabsorbent polymers used with water, and then argues, water, a well known lubricant, reduces friction. (July 25 Office Action, p. 6, par.3). Applicant distinguishes this disclosure by claiming the lubricant additive as mandatory in the water-superabsorbent composition. The references relied on by the examiner do not teach or suggest the combination of lubricant additives with water, let alone this combination with a superabsorbent polymer.

Applicant distinguishes Levy since the reference relates to insecticides, not lubricants and therefore amounts non-analogous art. Levy does not relate to the same field of endeavor as the present invention comprising lubricant compositions. It also is not reasonably pertinent to the particular problems faced by the applicant in making the present invention. In re Clay, 966 F.2d 656, 23 USPQ 2d 1058 (Fed. Cir. 1992)

The examiner rejects the claims 29, 30, 35, 36, 41, and 42 under 35 U.S.C. § 102 (b) as anticipated by Geursen et al. WO 93/18223. (counterpart U. S. Patent No. 5,534,304) (Geursen). Applicant traverses the rejection and request further consideration and reexamination.

Guersen discloses a process for treating a substrate such as a fiber or fibrous product with a superabsorbent material and addresses the dual problem, on the one hand of developing a flowable aqueous emulsion having a sufficient amount of superabsorbent polymer to form a coating that acts as a water barrier, and on the other, of providing a formulation that did not gel because of the superabsorbent polymer.

Geursen specifically notes:

The drawback to impregnating a substrate with a superabsorbent material dispersed in an aqueous system is that, due to the superabsorbent's high viscosity-enhancing action, steady feeding of it is extremely difficult if not impossible. Further, on account of the restricted superabsorbent concentration in the impregnating liquid only a small quantity of superabsorbent material can be applied to the yarn per treatment. Another drawback to this method is that the comparatively large amount of impregnating liquid which is applied to the substrate with the superabsorbent material has to be removed by evaporation.

Geursen WO 93/ par. bridging pp. 4-5; U.S. column 2, lines 57-67.<sup>1</sup>

The superabsorbent polymer employed by Geursen does not dissolve in water, so Geursen formed an emulsion of the polymer in water by polymerizing the water

soluble monomer in a water-in-oil emulsion to form the polymer in the aqueous phase. (WO 93/ p. 7, lines 16-19; U.S. Col. 4, lines 1-16) <sup>2</sup>. Geursen uses the emulsion as a coating, and subsequently heat-treats it to drive off the water phase and oil phase, generally a relatively low boiling paraffin hydrocarbon. (WO 93/ p. 5, lines 19-28; U. S. Col. 3, lines 15-23). Geursen also discloses commercially available water-in-oil emulsions prepared in the same way, which may also include additives, such as lubricants and emulsifying agents. (WO 93/ p. 7, lines 20-27, p. 8 lines 10-14; U. S. Col. 4, lines 17-26; 42-47).

The disclosed aqueous polymerization of the monomer into a superabsorbent polymer resulted in a polymer that absorbs about 45 or 20 times its weight in water. An examination of the Geursen examples will show that the reference contains experimental data showing only the production of these low water absorbing superabsorbent polymers, and the desirability of using them and not superabsorbent polymers that absorb greater than about 100 times their weight in water. Geursen therefore teaches away from the use of superabsorbent polymers that absorb greater than about 100 times their weight in water, and also lacks an enabling disclosure of how to produce oil in water emulsions of superabsorbent polymers that absorb greater than

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1 Willemsen et al. U. S. Pat. No. 6,319,558 ("Willemsen") (of record), assigned to Akzo Nobel, as is Geursen, acknowledges the same problem. Willemsen USPTO Patent Full Text and Image Data Base, p.4, par. 1.

2 Guersen forms a coating "via an emulsion of the superabsorbent in a water-in-oil-emulsion, the superabsorbent material being present in the aqueous phase of the emulsion." WO 93/ p.7, lines 1-5; U.S. col. 3, lines 64-67 (emphasis added).



about 100 times their weight in water. Lacking an enabling disclosure, Geursen does not anticipate applicant's invention. Elan Pharmaceuticals et al. v. Mayo Foundation, No. 00-1467 slip op. (Fed.Cir. 2003), and cases cited therein. The following analysis shows this lack of an enabling disclosure.

The reference describes yarns coated with a superabsorbent polymer composition which have a "swelling value" (WO 93/ p. 13line 15 to p.14 line 5; U. S. Col. 7, lines 19-44) defined by a formula (WO 93/ p.13, lines 9-14; U. S. Col. 7, lines 45-51). The swelling value consists of a number that indicates the relative water absorbency of the yarn or the yarn coated with the superabsorbent polymer composition.

The following analysis of the data in Geursen bears out the reference does not teach or suggest superabsorbent polymers that can absorb greater than about 100 times their weight in water for the process or product disclosed.

Table A, reports the swelling values of a polyester yarn coated with a superabsorbent water-in-oil emulsion. Prior to coating, the yarn had a swelling value of 9 (WO 93/ p. 17, line25; U. S. Col. 9, lines 34-35). The formula in WO 93/ p.13, lines 9-14; U. S. Col. 7, lines 45-51 gives the swelling value of the superabsorbent polymer:

$$\text{swelling value} = \frac{(a - b) \times 100}{b}$$

b

Arbitrarily setting the weight of the yarn (the value for "a") at 100 grams will give the dry weight of the yarn (the value for "b") as follows:

Example 1                      Swelling value of uncoated yarn = 9 (Col. 9, lines 34-35)

$$\frac{100-b}{b} = 0.09$$

$$100 = 1.096b$$

$$b = 91.74 \text{ (dry weight of yarn)}$$

$$\text{Yarn water absorption} = 100 - 91.74 = 8.26$$

Example 1                      Swelling value of coated yarn = 114 (Col. 9, line 28)

$$\frac{100-b}{b} = 1.14$$

$$100 = 2.146b$$

$$b = 46.72 \text{ (dry wt. of yarn and superabsorbent polymer)}$$

$$\text{Coated yarn water absorption} = 100 - 46.72 = 53.28$$

$$53.28 - 8.26 = 45.02 \text{ water absorbed by superabsorbent polymer}$$

$$46.27 \times 2.1\% \text{ polymer (Col 9, line 28)} = 0.97 \text{ superabsorbent polymer on yarn}$$

$$\frac{45.02}{0.97} = 46.3 \text{ Superabsorbent polymer absorbs 46.3 times its weight in water.}$$

This shows that 0.97 grams of superabsorbent polymer picked up or absorbed 45.02 grams of water or 46.3 times its weight in water, less than one-half of that of applicant's claimed superabsorbent polymer which absorbs greater than about 100 times its weight in water.

The reference also shows Example 3 uses the same yarn employed in Example 1 but with the application of 7.0 weight percent of the same superabsorbent polymer employed in Example 1. Also the swelling value of the sample increased from 114 in Example 1 to 171 in Example 3. Using the method above, shows that the superabsorbent polymer of Example 3 had a water absorbency of about 20 (actually, 21.2, which sets the superabsorbent polymer concentration at about 80 weight %) as compared to the water absorbency of Example 1 of 45 ( i.e., a superabsorbent polymer concentration of 55 weight %).

The same calculations will show the superabsorbent polymer of experiment 4 (Table B) coated on a nylon-6,6 yarn absorbs about the same amount of water, i.e., less than about one half applicant's claimed superabsorbent polymer that absorbs greater than about 100 times its weight in water.

These data from Guersen clearly show the inventors did not know how to combine a lubricant with a superabsorbent polymer that absorbs greater than about 100 times its weight in water, or the desirability of doing this. Since the reference does not disclose this type of polymer coating or how to produce it, Geursen does not contain an enabling disclosure. Applicant, on the other hand, has disclosed methods on how to combine superabsorbent polymers that absorb greater than about 100 times their weight in water with lubricants and use the combination as a lubricant.

Guersen attempted to address the problem of coating a superabsorbent polymers on yarn in light of the primary difficulty the industry had with them, namely that when combined with water they caused extremely high viscosities at a relatively low concentration. The superabsorbent polymer formulation sought by Guersen, not only had to have some flowable characteristics in order to apply it as a coating material, but also had to have a relatively high solids content. Cf. Guersen, WO 93/ par. bridging pp. 4-5, U.S. column 2, lines 57-67.

Guersen addressed this problem by polymerizing the superabsorbent monomer to form an emulsion with the superabsorbent polymer in the water phase. Analyzing the nature of water-in-oil emulsions will illustrate further how Guersen achieved the goal of not only providing a superabsorbent polymer formulation having relatively high superabsorbent polymer solids, but also a flowable composition that could be coated onto a substrate with relative ease.

This water phase consists of very small droplets of superabsorbent polymer in combination with water (the discontinuous phase) suspended in the oil phase (the continuous phase). One can easily visualize that the viscosity of the droplets made up of water and a superabsorbent polymer would have little, if any, effect on the oil or continuous phase if the particles were sufficiently mobile in the continuous phase, e. g., by employing a sufficient volume of the continuous phase. By utilizing an emulsion, Guersen addressed the major problem caused by the high viscosity superabsorbent polymers, namely their tendency to impart high viscosity to the formulation. Guersen

thereby obtained a formulation that flowed readily and fulfilled the need to employ superabsorbent polymers as an easily applied coating.

Geursen, however, had to address another problem, namely the superabsorbent polymer solids content in the dispersed phase or the droplets. If he employed a superabsorbent polymer that absorbed 1,000 times its weight in water the droplets would contain 1,000 parts by weight of water for every one part of superabsorbent polymer (0.1% superabsorbent polymer) and he would not resolve the problem of applying a sufficient amount of superabsorbent polymer onto a substrate so it could act as a water barrier. Similarly if he used a superabsorbent polymer that absorbed greater than about 100 times its weight in water, each droplet would contain about 100 parts by weight of water for one part of superabsorbent polymer (1% by weight of superabsorbent polymer). In both instances, the superabsorbent polymers would not provide a high solids coating.

Geursen appears to address this solids problem by using a superabsorbent polymer that absorbs only about 45 times its weight in water, and using the analysis above, each droplet of the emulsion would contain about 55 parts by weight of superabsorbent polymer and 45 parts by weight of water, a 55-fold increase in solids over a superabsorbent polymer that absorbs about 100 times its weight in water. Geursen employing a superabsorbent polymer that absorbed about 20 times its weight in water gave him a solids content of 80 parts of the polymer, amounting to an 80-fold

increase over a superabsorbent polymer that absorbs about 100 times its weight in water.

Using superabsorbent polymers that only absorb about 45 or 20 times their weight in water allowed Geursen to achieve the dual objective of not only laying down relatively large amounts of superabsorbent polymer as a coating, but also avoiding the problem of removing large quantities of water from the substrate.

Geursen also appears to avoid this problem of high water absorbing superabsorbent polymers by using a sodium sulphonate electrolyte in the emulsion polymerization process. For example, Guersen, WO 93/ par. bridging pp.16-17; U. S. column 9, lines 8 et. seq. discloses using a sodium sulphate ("sulpho") salt of the superabsorbent monomer.<sup>3</sup>

Levy (of record), however, discusses this well known technique of reducing both

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<sup>3</sup> Geursen might also have employed sodium chloride as an electrolyte to achieve this result, which this amendment discusses later.

the viscosity and water absorbency of a superabsorbent polymer, observing:

normally, unmixed formulations of superabsorbent polymers and water have a tendency to form gels of such a high viscosity that they are not flowable. An additional technique used to render a viscous superabsorbent polymer composition . . . flowable, is the additional [sic, addition] of varying concentrations of one or more salt(s)/electrolyte(s) such as sodium chloride. . . . These salt(s)/electrolyte(s) have a tendency to interfere with the hydrogen bonding or reduce the hydrophilic bonding of the water to the gel. Also, superabsorbent polymers . . . absorb less water when electrolytes are present.

Levy, U.S. Patent No. 4,985,251 column 15, lines 12-26 (emphasis added).

Takeda et al. United States Patent No. 4,618,631 (of record) teaches the same phenomenon in table I at column 7, lines 41-55, Table II, column 8, lines 60-65, and Table III, column 10, lines 1-10. These data show that the addition of an electrolyte to a superabsorbent polymer reduces the water absorbency of the polymer by a factor of about ten. For example, the addition of an electrolyte to a superabsorbent polymer with a water absorbency of about 500 times its weight in water will reduce the absorbency of the polymer to about fifty times its weight in water. Garner et al. Journal of Chemical Education, January 1997, Vol. 74 No. 1, p. 95 (of record) describes this as well.

This raises the question as to whether or not Geursen added sodium chloride or a similar salt to the superabsorbent polymer emulsion to reduce the water absorbency of the polymer. A further examination of the data reported in Table A of Geursen suggests this. The superabsorbent polymer of Example 1 of Geursen absorbed about 45 times its weight in water, whereas the superabsorbent polymer of Example 3



absorbed about 20 times its weight in water. Bearing in mind that Geursen employed the same superabsorbent polymer in both examples, the skilled artisan would know that something was done in the experiments to obtain that difference in water absorbency, but not reported. Applicant believes that Geursen added a salt such as sodium chloride to the emulsion of Example 3 to change the water absorbency of the superabsorbent polymer.

Another factor that influences the absorbency of these superabsorbent polymers is the degree of polymer cross-linking, but Geursen doesn't discuss this, even though known in the prior art, e.g., Garner et al. supra. Geursen by employing the same superabsorbent polymer in both examples 1 and 3 does not appear to have changed the cross-linking of the superabsorbent polymer. Geursen also discloses the addition of other components to the polymerization reaction, without indicating anything about the effect they may have on water absorbency of the polymer obtained. Geursen, WO 93/ par. bridging pp. 7-8, p. 8, lines 20-30; U.S. column 4, lines 28-33, lines 51-58.

Although Geursen might appear to disclose using superabsorbent polymers having water absorbencies greater than 100, (WO 93/ par. bridging pp.12-13; U.S. column 7, lines 1-6) he does not. A closer reading of the reference shows this disclosure relates to a "product" further described as a combination of the substrate with the superabsorbent polymer, and not the superabsorbent polymer alone. WO93/ lines 23-24; U.S. column 6, lines 57-60. As illustrated above, Geursen's substrates absorb water and have an affect on the overall water absorbtion of the combination. The water

absorption of the "product" takes into account the combined effect of the substrate absorbing water and the polymer absorbing water. Geursen therefore does not teach the use of a superabsorbent polymer having a water absorbency greater than about 100, but rather the water absorbency of the "product" which is the substrate combined with the superabsorbent polymer.

Because Geursen teaches superabsorbent polymer coatings that absorb only about 45 or 20 times their weight in water, the reference clearly raises the question of how the skilled artisan gets over the hurdle of this water absorbency of 45 or 20 to arrive at applicant's lower limit of water absorbency greater than about 100, and why she or he would be led by the reference to do this? The reference clearly lacks an enabling disclosure of how to do it. The Examiner therefore has not met the burden of providing evidence that Geursen does in fact show a superabsorbent polymer in an aqueous medium suitable for coating a substrate, where the superabsorbent polymer absorbs greater than about 100 times its weight in water. Lacking this evidence, the rejection cannot stand.

The Examiner rejects claims 29, 30, 35, 36, 41, and 42 under 35 U.S.C. § 103 (a) as obvious in view of Geursen combined with the admitted prior art in view of Hopkins et al., U.S. Patent No. 5,362,788 ("Hopkins") and Sayad et al. United States Patent No. 3,336,225 ("Sayad"). Applicant traverses the rejection and requests further consideration and reexamination.

Applicant distinguishes Guersen and Hopkins for all of the reasons given previously.

The teachings of Brannon-Peppas (the admitted prior art) only refer to art known superabsorbent polymers, and standing by itself, or even taken with the Hopkins teaching does not convey to a person with skill in the art that Hopkins obtains a superabsorbent polymer combined with a lubricant.

Applicant distinguishes Sayad since the reference only teaches water-soluble acrylamides and not superabsorbent polymers that absorb greater than about 100 times their weight in water. The two polymers are not the same. Superabsorbent polymers swell when combined with water, but do not dissolve in water. Water-soluble acrylamides, as the term implies, dissolve in water. Sayad employs water-soluble acrylamides in combination with an aqueous soap solution in a method for reducing friction on a conveyor, but does not use superabsorbent polymers. In addition, Sayad fails to teach or suggest applicant's lubricant additives with the aqueous soap solution.

The Examiner nonetheless asserts that Sayad discloses a superabsorbent polymer even though she cannot find anything in the reference to support her conclusion. In fact, if Sayad did contain this teaching, the Examiner would not have to resort to combining the teachings of Sayad with other references that specifically describe superabsorbent polymers. The Examiner does not point to anything in this

reference that shows Sayad describes superabsorbent polymers. She cannot, since Sayad does not contain this teaching.

The Examiner rejects claims 31-34, 37-40, 43, and 44 under 35 U.S.C. §103(a) as unpatentable over Sayad combined with Admitted Prior Art in view of Hopkins and Guersen, and further in view Schey and Booser.

Applicant distinguishes Sayad, the Admitted Prior Art, Hopkins, and Guersen for all the previous reasons. The references to Schey and Booser merely describe lubricant technology that applicant already referred to in Kirk-Othmer Encyclopedia of Chemical Technology, Second Edition, pp. 559-595 in the last paragraph on page 18 of the written description. The various lubricants and lubricating systems described in Schey and Booser only elaborate on the description of the lubricant materials applicant included in the written description.

#### **The References Provide No Motivation to Combine Their Teachings**

The Examiner "has to point to some teaching, suggestion or motivation in the prior art to select and combine the references that . . . [she] relied on to show obviousness." In re Lee, 61 U.S.P.Q. at 1434 (emphasis added). "When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to select and combine the references relied on as evidence of obviousness... 'the central question is whether there is a reason to combine references.'" Lee, 61 U.S.P.Q. at 1435 (emphasis added) (citation omitted). Applicant

submits that the Examiner has not pointed to anything in the cited references that would lead a person with ordinary skill in the art to combine their teachings.

The combination of references does not make applicant's invention obvious unless the prior art also suggests the desirability of the combination. M.P.E.P. Section 2143.01 citing In re Mills, 916 F.2d 680, 16 U.S.P.Q. 2nd 1430 (Fed. Cir. 1990). Also, there must be some reasonable expectation of success (M.P.E.P. Section 2143.02, and cited authorities) and that some advantage or expected beneficial result would have been produced by their combination. (M.P.E.P. Section 2144 citing In re Sernaker, 702 F.2d, 989, 994-95, 217 U.S.P.Q. 1,

In rejecting the claims on a combination of references, the Examiner has Hopkins teaching a polymer such as cellulose acetate with a plasticizer, as a matrix for a superabsorbent material, and Geursen teaching a superabsorbent polymer absorbing only about 45 times its weight in water applied to a substrate as a water in oil emulsion, followed by removing the oil phase (a paraffinic hydrocarbon) by evaporation. Adding The Admitted Prior Art to the mix gives the Examiner citations to show the art contains teachings of superabsorbent polymers that absorb greater than about 100 times their weight in water, as well as extensive disclosures of lubricant materials and technology, but applicant disclosed this in the written description when he filed the application. Where then, in all of these references, can a skilled artisan find a teaching, suggestion, or motivation to pick and chose from them, and then combine the pieces to arrive at applicant's invention that broadly comprises a lubricant in combination with a superabsorbent polymer that absorbs greater than about 100 times its weight in water?

Applicant submits the skilled artisan couldn't without applicant's disclosure in front of them, especially where the references, such as Geursen, do not provide any teaching of how to combine lubricants with superabsorbent polymers that absorb greater than about 100 times their weight in water.

A 35 U.S.C. § 103 rejection cannot stand if it amounts to taking applicant's "claims as a frame and the prior art references as a mosaic to piece together a facsimile of the claimed invention." W. L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1551, 220 U.S.P.Q. 303 (Fed. Cir. 1983).

The examiner has not pointed to anything in the references that suggest the desirability of the combination. She also has not found anything in them that points to some reasonable expectation of success in making the combination, and lastly she gives no indication where they teach or suggest some advantage or expected beneficial result would have been produced by their combination. The references neither contain these suggestions nor convey some reasonable expectation of success. They fail to meet any test of motivation to combine their teachings.

**The Examiner Has Improperly Relied On Non-Analogous**

**Art to Make The Rejection**

By combining the teachings of the various references under 35 U.S.C. § 103, the Examiner has relied on non-analogous art since the references are not related to the same field of endeavor or reasonably pertinent to the problem addressed by the inventor. In re Clay, 966 F.2d, 656, 23 U.S.P.Q. 2d at 1058 (Fed. Cir. 1992).

Hopkins falls into the category of non-analogous art since the reference describes a polymeric matrix for a superabsorbent polymer having no disclosed utility, other than a suggestion that it forms a porous filtration membrane. Hopkins does not relate to the same field of endeavor nor is it "reasonably pertinent to the problem with which the inventor is involved." Clay, 966, F.2d at 658, 23 U.S.P.Q. 2d at 1060.

### **The Provisional Double Patenting Rejection**

The Examiner provisionally rejects claims 29-43 under the judicially created doctrine of obviousness-type double patenting as unpatentable over the claims of copending application Serial No. 09/359,809.

The Patent Office has not issued a Notice of Allowance in the copending application applied in the double patenting rejection. When a provisional double patenting rejection is the sole remaining rejection in one of two or more applications subject to the same rejection but which remain under rejection on additional grounds, the Manual of Patent Examining Procedure ("MPEP") requires the Examiner to withdraw the rejection in the application that only has an outstanding provisional double patenting rejection and permit it to issue as a patent. Once it issues, the MPEP instructs the examiner to apply a non-provisional double patenting rejection to the other application(s). MPEP § 804(I)(B) p.800-15 July 19, 1998.

Application Serial No.: 09/357,957  
Amendment dated October 21, 2003  
Response to July 25, 2003 Office Action

**CONCLUSIONS**

Applicant requests the Examiner to withdraw the rejections in view of the foregoing amendments and remarks and pass the application to issue .

Respectfully submitted,

THE LAW OFFICES OF ROBERT J. EICHELBURG

Dated: October 21, 2003

By: Robert J. Eichelburg  
Robert J. Eichelburg  
Reg. No. 23,057

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8**

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Dated: October 21, 2003

By: Robert J. Eichelburg  
Robert J. Eichelburg  
Reg. No. 23,057